

~~SN~~ 09/934,443

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Roberto Gomperts et al.	Examiner:	Syed Ali
Serial No.:	09/934,443	Group Art Unit:	2195
Filed:	August 20, 2001	Docket:	499.714US1
Title:	TRANSPARENT DISTRIBUTION AND EXECUTION OF DATA IN A MULTIPROCESSOR ENVIRONMENT		

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The applicant requests review of the final rejection in the above-identified application.
No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated below:

§102 Rejection of the Claims

Claims 1-6, 9-15, 17-19 and 21-31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Blelloch et al. (U.S. Patent No. 5,768,594). It is of course fundamental that in order to sustain an anticipation rejection each and every step or element in the rejected claims must be taught or suggested in the cited reference.

Applicants and the Examiner appear to agree on the interpretation of the teachings presented in Blelloch. Specifically, the Examiner acknowledges and agrees with Applicants' assessment that Blelloch teaches breaking discrete and different tasks of a sequential program up and parallel processing some of those broken pieces.

What it appears the Applicants and the Examiner disagree with is how to interpret Applicants' claims and claim language and specification. Moreover, it appears that the Examiner is adding interpretations to Blelloch to suggest that the processing elements in Blelloch are the programs and are therefore substantially identical to one another.

Applicants continue to respectfully disagree with the Examiner's interpretations of the claimed language, the specification, and the interpretations of some aspects of the Blelloch teaching. More specifically, the Examiner asserts that FIGS. 2 and 3 in the Blelloch reference,

which show processing elements (PE's), demonstrates that Blleloch teaches "processing programs" that are substantially identical. Applicants respectfully disagree with this interpretation. The processing elements defined in Blleloch are the physical hardware (the processors) and they are not being referenced or even taught in Blleloch to be the "processing programs" as the Examiner appears to have alleged in the Final Office Action.

Specifically, the Examiner is directed to "Summary of the Invention" section where it is stated that the tasks are processed "in the parallel processing elements." The phrase "processing element" is used exclusively in Blleloch to mean the hardware processors that actually execute software. The "processing elements" are not the tasks or the programs associated with the tasks. Applicants respectfully disagree with this interpretation of the Blleloch teaching, which the Examiner has asserted and reserves the right to seek clarification from the Board of Patent Appeals on appeal.

In fact, throughout the Blleloch reference the "processing elements" are referenced as traditional processor hardware that "execute" the tasks of the sequential program. Applicants respectfully fail to see how this specific usage of the phrase "processing elements" within the Blleloch reference can even reasonably be interpreted in a different manner or in a manner proposed by the Examiner where the "processing element" of Blleloch is a software program. See the discussion of the "processing element" with respect to FIG. 3 in the reference, where the "processing element" is defined as a processor, a memory, a buffer, and connection to a router. This is not a software program, it is a hardware configuration or hardware unit that executes software programs.

The Examiner also claims that Applicants have mischaracterized its own invention. Applicants respectfully disagree with this contention. First, the Examiner states that the initiating program is subdivided and submitted to processing programs. Page 8 of the original filed specification indicates that it is the "data string" associated with an add operation that is subdivided and not the add operation as the Examiner appears to contend. The Examiner is also directed to the end of page 7 where it is stated that the initial program resides in replica across the network on different processing elements.

It appears the Examiner is attempting to construe the claimed language in a manner that would fit with Blleloch; however the language of the claim on its face does not support this

interpretation and the original specification does not support this interpretation. Specifically, the program resides in duplicate across the network and it is the “parameters” or data string that is subdivided. It is not the program that is subdivided and there is no support for this in the specification or with any reasonable interpretation of the existing claim language.

Applicants and the Examiner agree that Blelloch breaks up or subdivides tasks of a sequential program for execution in parallel. What the Applicants and Examiner disagree in is that Applicants’ claimed language and specification does this same thing. Applicants specification and claims are clear and unambiguous, a program is replicated and the input parameters are divided and doled out to replica versions for same program appearing in duplicate on the network for parallel processing. Applicants and Examiner also disagree in what a “processing element” is in Blelloch. Applicants believe that it is clear the “processing element” is a hardware component having a processor, memory, buffer, and connection to a router and that it is not the same program that is being processed; rather the processing element processes unique tasks of a program supplied to it.

Applicants believe that they have properly stated the Examiner’s position and the points of disagreement and respectfully request that if this is correct the Examiner state as much in the Advisory Response for purposes of making the appeal direct and to the point. In the alternative, Applicants respectfully request that the claims be allowed.

§103 Rejection of the Claims

Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Blelloch et al. (U.S. Patent No. 5,768,594) in view of Shah et al. (U.S. Publication No. 2002/0035556). Claim 16 is dependent from independent claim 15; therefore for the remarks presented above with respect to independent claim 15, the rejection of claim 16 should be withdrawn. Applicants respectfully request an indication of the same.

Claims 20 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Blelloch et al. (U.S. Patent No. 5,768,594) in view of Klein (U.S. Patent No. 6,185,590). Claim 20 is dependent from independent claim 18 and claim 32 is dependent from independent claim

30; thus, for the remarks presented above with respect to independent claims 18 and 32, the rejections with respect to claims 20 and 32 should be withdrawn. Applicants respectfully request an indication of the same.

CONCLUSION

The applicant respectfully submits that all of the pending claims are in condition for allowance, and such action is earnestly solicited. The Examiner is invited to telephone the below-signed attorney at (513) 942-0224 to discuss any questions which may remain with respect to the present application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

ROBERTO GOMPERTS ET AL.

By their Representatives,

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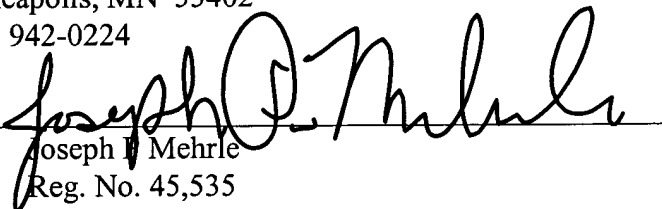
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Date

06/06/06

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Date of Deposit: June 6, 2006

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to The Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.